

What is claimed is:

1. A device for compressing cancellous bone comprising:

an expandable body including an internal restraint coupled to the body which directs expansion of the body.

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2. A device according to claim 1 wherein the internal restraint includes an internal membrane.

3. A device according to claim 1 wherein the expandable body includes an elongated axis, and

5 wherein the internal restraint includes an internal membrane that extends transversely of the elongated axis between opposing interior side surfaces of the expandable structure.

4. A device according to claim 1 wherein the expandable body includes an elongated axis, and

5 wherein the internal restraint includes an internal membrane that extends along the elongated axis between opposing end surfaces of the expandable structure.

5. A device according to claim 1 wherein the expandable body includes an elongated axis, and

5 wherein the internal restraint includes an internal membrane that extends in one direction along the elongated axis between opposing end surfaces of the expandable structure and in a second direction transversely of the elongated axis between opposing interior side surfaces of the expandable structure.

6. A device according to claim 1 wherein the internal restraint directs expansion of the expandable body more in one direction than in another

direction transverse the one direction.

7. A device according to claim 1
wherein the expandable body includes an elongated
axis,

5 wherein the internal restraint constrains expansion of
the expandable body along the elongated axis.

8. A device according to claim 1
wherein the expandable body includes an elongated
axis,

5 wherein the internal restraint directs expansion of
the expandable body more in one radial direction from the
elongated axis than in a second radial direction from the
elongated axis.

9. A device according to claim 8
wherein the internal restraint constrains expansion of
the expandable body along the elongated axis.

10. A method for treating bone comprising the steps
of
inserting a device as defined in claim 1 inside bone,
causing directed expansion of the body in cancellous
5 bone, and
compacting cancellous bone by the directed expansion.

11. A method according to claim 10
wherein the directed expansion lifts vertebral end
plates.

12. A method according to claim 10
wherein the directed expansion lifts tibial plateau
depressions.

13. A method according to claim 10
wherein the directed expansion lifts proximal humerus
depressions.

14. A method according to claim 10
wherein the directed expansion lifts cortical bone.

15. A method according to claim 10
wherein the step of compacting forms a cavity.

16. A method according to claim 15
further including the step of filling the cavity with
a material.

17. A method according to claim 16
wherein the material comprises bone cement.

18. A method according to claim 16
wherein the material comprises synthetic bone
substitute.

19. A method according to claim 16
wherein the material comprises a flowable material
that sets to a hardened condition.

20. A device for compacting cancellous bone
comprising a body adapted to be inserted into bone and
undergo expansion in cancellous bone to compact cancellous
bone, the body including material that, during the expansion
5 in cancellous bone, applies a force capable of moving
fractured cortical bone, and further includes an interior
membrane to constrain the expansion in cancellous bone.

21. A device according to claim 20
wherein the expandable body includes an elongated
axis, and

wherein the internal membrane extends transversely of
5 the elongated axis between opposing interior side surfaces
of the expandable structure.

22. A device according to claim 20
wherein the expandable body includes an elongated
axis, and

wherein the internal membrane extends along the
5 elongated axis between opposing end surfaces of the
expandable structure.

23. A device according to claim 20
wherein the expandable body includes an elongated
axis, and

wherein the internal membrane extends in one direction
5 along the elongated axis between opposing end surfaces of

the expandable structure and in a second direction transversely of the elongated axis between opposing interior side surfaces of the expandable structure.

24. A device according to claim 20

wherein the internal membrane constrains expansion of the expandable body more in one direction than in another direction transverse the one direction.

25. A device according to claim 20

wherein the expandable body includes an elongated axis,

5 wherein the internal membrane constrains expansion of the expandable body along the elongated axis.

26. A device according to claim 20

wherein the expandable body includes an elongated axis,

5 wherein the internal membrane constrains expansion of the expandable body more in one radial direction from the elongated axis than in a second radial direction from the elongated axis.

27. A device according to claim 26

wherein the internal membrane constrains expansion of the expandable body along the elongated axis.

28. A method for treating bone comprising the steps of

5 inserting a device as defined in claim 20 inside bone, causing constrained expansion of the body in cancellous bone, and

compacting cancellous bone by the constrained expansion.

29. A method according to claim 28

wherein the constrained expansion lifts vertebral end plates.

30. A method according to claim 28

wherein the constrained expansion lifts tibial plateau depressions.

31. A method according to claim 28
wherein the constrained expansion lifts proximal
humerus depressions.

32. A method according to claim 28
wherein the constrained expansion lifts cortical bone.

33. A method according to claim 28
wherein the step of compacting forms a cavity.

34. A method according to claim 33
further including the step of filling the cavity with
a material.

35. A method according to claim 33
wherein the material comprises bone cement.

36. A method according to claim 33
wherein the material comprises synthetic bone
substitute.

37. A method according to claim 33
wherein the material comprises a flowable material
that sets to a hardened condition.